



920.326.5193 Randolph
608.251.4318 Madison
800.321.5193 Toll Free
563.203.0182 Cresco, IA
920.326.5209 Fax
January 28, 2014

Well Drilling, Inc.
"Well Worth It"

P.O. Box 150
Randolph, WI 53956

Dave Johnson
Wisconsin Department of Natural Resources
Private Water Systems Section
Bureau of Drinking Water and Ground Water
101 S Webster Street
P.O. Box 7921
Madison, WI 53707-7921

RECEIVED-DNR
JAN 30 2014
DRINKING WATER & GW

RE: High Capacity Well Application for the A.F. Gelhar Company Inc., P.O. Box 126, Fairwater, Wisconsin, 53931, Town of Mackford, Green Lake County.

Dear Dave:

On behalf of Jim Gelhar owner of A.F. Gelhar Company Inc., Sam's Well Drilling, Inc., (SAMS) proposes to install an additional high-capacity well for the purpose of washing sand at a processing plant located at N2402 County Highway A, Markesan, Wisconsin. The enclosed application is for this well.

At this time, there are three other wells located on the property. Two of the wells are production wells for the plant and one well supplies the office. I have enclosed the Well Construction Reports for all of the wells with this correspondence. A.F. Gelhar Company, Inc., requires additional water as the amount of sand being processed has increased recently. The proposed wells will be located at the edge of the quarry. The A.F. Gelhar Company Inc., would like to have this well operational by June of 2014. If you have any questions regarding this project, please contact me at (920) 326-5193.

Sincerely,

SAM'S WELL DRILLING, INC.

Jeff Kramer, P.G.
Hydrogeologist

Agent authorized to submit this application on behalf of the property owner, Jim Gelhar of A.F. Gelhar Company Inc.

www.samswelldrilling.com

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High Capacity, School or Wastewater Treatment Plant
Well Approval Application

Form 3300-256 (R 7/05)

JAN 30 2014

Page 1 of 6

Notice: Prior department approval is required for the construction, reconstruction or operation of a high capacity well or system of high capacity wells, a school well or a wastewater treatment plant well in accordance with Section NR 812.09(4)(a), Wisconsin Administrative Code. Personally identifiable information collected on this form, including such data as your name, address and phone number, will be used for management of department programs and is unlikely to be used for other purposes. This information will be addressable under Wisconsin's Open Records Laws, ss. 19.32 - 19.39, Wis. Stats.

Use this form to request an approval for installation of a well or wells on a high capacity property, seek approval to make other changes to a high capacity property or to modify a well on a high capacity property, as required by NR 812.09(4)(a), Wisconsin Administrative Code. Refer to definitions of high capacity well, high capacity property and high capacity well system on page 5.

This form is not intended to be used when seeking approval for construction or modification of wells serving water systems regulated under ch. NR 811, Wis. Adm. Code. Any water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartments, 10 or more condominiums, or 10 or more duplexes is regulated under ch. NR 811, Wis. Adm. Code. See NR 811.01, Wis. Adm. Code for applicability requirements.

Applicant Information

Application Prepared By (Name and Title) JEFF KRAMER / HYDROGEOLOGIST		Company SAM'S WELL DRILLING	
Street Address P.O. BOX 150		City RANDOLPH	State WI
Telephone Number 920-326-5193		Fax Number 920-326-5209	E-Mail Address JEFFK@SAMSWELLDILLING.COM

Property Ownership Information

Property owner, if different than applicant (Name of Person and Title) JIM GELHAR / OWNER		Company A.F. GELHAR CO. INC.	
Street Address P.O. BOX 126		City FAIRWATER	State WI
Telephone Number 920-398-1027		Fax Number 920-398-3567	E-Mail Address

Well Operator Information

Well operator if different than owner (Name of Person and Title) TOM PETHKE / OPERATIONS MANAGER		Company A.F. GELHAR CO. INC.	
Street Address N 2802 COUNTY HIGHWAY A		City MARKESAN	State WI
Telephone Number 920-398-1027		Fax Number 920-398-3567	E-Mail Address TOMAFGELHAR@GMAIL.COM

Property Information

Enter the High Capacity Well File Number below if the property is already a high capacity property. If the property is not designated as a high capacity property at the time of application, enter "NONE." NOTE: Find the file number in upper right hand corner of the most recent high capacity well approval, or use the compact disk of departmental well data that is issued to drillers and pump installers. On the compact disk, see "File location" in red print in "Location" section. File number format is as follows: (1 or 2 digits for county) - (1 digit for well classification) - (1 to 4 digits for assigned property no.).

County GREEN LAKE	Town MACKFORD	High Capacity Well File No.
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Submittal Purpose

Check all that apply:

- ☒ Install one or more new wells with a capacity greater than 70 gallons per minute.
- ☐ Install one or more new wells with a capacity less than 70 gallons per minute on a high capacity property.
- ☐ Replace one or more wells with a capacity greater than 70 gallons per minute.
- ☐ Replace one or more wells with a capacity less than 70 gallons per minute on a high capacity property.
- ☐ Reconstruct one or more wells with a capacity greater than 70 gallons per minute.
- ☐ Reconstruct one or more wells with a capacity less than 70 gallons per minute on a high capacity property.
- ☐ Increase pumping rate in one or more wells to a rate greater than previously approved.
- ☐ Request continued operation of high capacity wells after a change in ownership. (No application fee required.)
- ☐ Renew a previous approval that has expired.
- ☐ Well (or wells) will serve a school or wastewater treatment plant. See definitions on page 5.
- ☐ Other, explain _____

Site Status Information

Determine the site status using the internet or the compact disk of departmental well data that is issued to drillers and pump installers and the information supplied by the property owner. Internet address is dnr.wi.gov/org/water/dwg/dws.htm. Enter YES or NO for each of the following questions.

YES NO

☐ ☒ Has the property boundary changed since the most recent high capacity well approval was issued? If the property is not yet a high capacity property, check NO.

☐ ☒ Has there been a change in well ownership since the last approval was written?

If YES, name of current owner:

Date of purchase:

☐ ☒ Has there been a change in well operator since the last approval was written?

If YES, name of current operator:

Date of change:

☐ ☒ Will a proposed well be connected to a plumbing system that is supplied by other sources (other wells, municipal supply, etc.)? If YES, include a schematic drawing showing backflow protection.

☐ ☒ Is a proposed well within 1,200 feet of a landfill? Determine if there are any landfills nearby, using the well information compact disk FIND feature. Enter the township, range and section of the well location. If the well is near a section line, also check the adjacent section or sections.

If YES, list the landfill site ID Number:

OR Landfill location: (Township/Range/Section)

☐ ☒ Is a proposed well on a property that has a contaminated site? If YES, list the BRRTS (Bureau for Remediation and Redevelopment Tracking System) Number here and specify if the site is open or closed:

☐ Open☐ Closed

☐ ☒ Is a proposed well on a property that has a groundwater use restriction recorded on the deed? If YES, list the BRRTS number, as assigned to the contaminated site by the DNR remediation and redevelopment program:

☐ ☒ Is a proposed well on a property that is listed on the department's registry of closed remediation sites for a groundwater use restriction? See compact disk or internet at maps.dnr.state.wi.us/imf/dnrinf.jsp?site=brrts. If YES, list the BRRTS Number here:

☐ ☒ Is a proposed well to be used for a public water supply system that serves 25 or more people? See definition of a "public water system" in the definitions section on page 5.

☐ ☒ Is a proposed well to be installed within a special casing area? Refer to the list of special casing areas that is published by the department and/or contact the regional DNR office.

☐ ☒ Has the number of wells or pumping capacity in an existing well increased since the most recent high capacity well approval was issued?

☐ ☒ Has the number of wells decreased since the most recent high capacity well approval? If the property is not yet a high capacity property, check NO.

☐ ☒ Is a non-pressurized storage vessel (i.e. reservoir) other than a pond proposed or in use?

☐ ☒ Will the well discharge directly to a storage pond?

☐ ☒ Is a pressurized tank with a capacity greater than 1,000 gallons proposed or in use?

☐ ☒ Is a proposed well within 1,200 feet of a quarry?

☐ ☒ Is a proposed well located in a floodplain or floodway?

☐ ☒ Are any existing well installations on the high capacity property out of compliance with Chapter NR 812, Wisconsin Administrative Code?

☐ ☒ Will the well be used as a source of bottled water?

☐ ☒ Are you seeking a variance to construct a well that has a capacity of less than 70 gallons per minute to low capacity well construction standards?

☐ ☒ Is the property served by a community water system?

Existing Well Information

Enter the following information on all existing wells on the property, if more than four wells, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	SOUTH WELL	OFFICE WELL	NORTH WELL	
Well Number Assigned by Owner (001, 002, etc.):	001	002	003	
WI Unique Well Number or NA if no number:	BES37	NA	MY174	
Permanent DNR High Capacity Well Number or N/A if none:	48012	NA	2387	
Public Water System ID Number, if Public (if not public, NONE):	NONE	NONE	NONE	
Potable or Non-Potable Use:	POTABLE	POTABLE	POTABLE	
Type of Well (Irrigation, Industrial, Residential, etc.):	INDUSTRIAL	OFFICE	INDUSTRIAL	
Requested Average Water Usage per Day in Gallons:	461,000	500	461,000	
Requested Maximum Water Usage per Day in Gallons:	461,000	1000	461,000	
Seasonal? (April to October, Year Around, etc.):	YEAR ROUND	YEAR ROUND	YEAR ROUND	
Approved Pumping Capacity if Previously Approved (gpm):	320	15	320	
Current Pump Type & Capacity (gpm):	SUBMERSIBLE/320	SUBMERSIBLE/15	SUBMERSIBLE/320	
Proposed Pump Type & Capacity if Change Requested (gpm):	NA	NA	NA	
Pump Discharge Type (Over Top of Casing Seal, Pitless, etc.):	OVER TOP OF CASING	PITLESS ADAPTER	OVER TOP OF CASING	
Discharge Location (Building Pressure Tank, Pond, etc.):	WASH POND	BUILDING PRESSURE TANK	WASH POND	
Height of Well Casing Above Ground in Inches:	24.0	12.0	12.0	
Potential Contaminant Sources and Distance:				
Well Loc: Quarter Quarter Section or Government Lot Number	NW 1/4 of NE 1/4	NW 1/4 of NE 1/4	NW 1/4 of NE 1/4	1/4 of 1/4
Section or French Long Lot No.	3	3	3	
Township:	T 14 N	T 14 N	T 14 N	T N
Range (Select E or W):	R 13 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	R 13 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	R 13 <input checked="" type="checkbox"/> E <input type="checkbox"/> W	<input type="checkbox"/> E <input type="checkbox"/> W
Latitude (Degrees and Minutes)	43° 42' 42"	43° 43' 025"	43° 43' 035"	° ' "
Longitude (Degrees and Minutes)	088° 56' 083"	088° 56' 063"	088° 43' 067"	° ' "
GPS Map Datum (WGS84, WTM91, etc.)	GPS008	GPS008	GPS008	
Include as much of the following information as practical for wells that do not have well construction records attached to the application, however if the well construction record is attached, applicant may leave the following rows blank.				
Date of Construction:	8/28/86	8/7/87	4/26/99	
Drilled by (Name of Drilling Firm):	ZOELLNER	ZOELLNER	CENTRAL	
Drilling Method(s) (Rotary, Percussion, Etc.)	ROTARY	ROTARY	ROTARY	
Well Depth in Feet:	375.0'	239.0'	412.0'	
Upper Enlarged Drillhole Diameter in Inches and Depth in Feet:	12.25 inches, 83.0 feet	10.0 inches, 83.0 feet	12.0 inches, 143.0 feet	inches, feet
Lower Drillhole Diameter in Inches and Depth in Feet:	8.0 inches, 375.0 feet	6.0 inches, 239.0 feet	8.0 inches, 412.0 feet	inches, feet
Well Casing Diameter in Inches and Depth in Feet:	8.0 inches, 83.0 feet	6.0 inches, 83.0 feet	6.0 inches, 143.0 feet	inches, feet
Well Casing Material and Wall Thickness:	STEEL 1.250	STEEL 1.280	STEEL 1.322	
Annular Space Material Between Casing and Drillhole Wall:	NEAT CEMENT	NEAT CEMENT	NEAT CEMENT	
Is There a Well Screen (Y or N) If so, Screen Material?:	N	N	N	

Proposed Well Information

Enter the following information on all proposed wells on the property, if more than two wells or alternate construction, submit additional sheets:

Well Name Assigned by Well Owner (North Well, etc.):	POND WELL	
Well Number Assigned by Owner (001, 002, etc.):	004	
Well Loc: Quarter Quarter Section or French Long Lot Number	NW 1/4 of NE 1/4 of Section 03	1/4 of 1/4 of Section
or Government Lot Number		
Township & Range (Select E or W)	T 14 N, R 13 <input type="checkbox"/> E <input type="checkbox"/> W	T N, R <input type="checkbox"/> E <input type="checkbox"/> W
Latitude (Degrees and Minutes)	43 ° 09.360	
Longitude (Degrees and Minutes)	089 ° 56.112	
GPS Map Datum (WGS84, WTM91, etc.)	GPS008	
Type of Well (Irrigation, Industrial, Residential, etc.):	Type: INDUSTRIAL <input checked="" type="checkbox"/> Potable Non-Potable	Type: <input type="checkbox"/> Potable Non-Potable
Drilling Method(s) (Rotary, Percussion, Etc.):	ROTARY	

Anticipated Geological Materials and Depths that Are Expected During Drilling:

Material and Depth Interval:	CLAY from 0' to 4'	LIMESTONE from 134' to 175'
Material and Depth Interval:	CLAY + GRAVEL from 4' to 15'	SHALE from 175' to 177'
Material and Depth Interval:	SANDSTONE from 15' to 100'	SANDSTONE from 177' to 500'
Material and Depth Interval:	SANDSTONE + SHALE from 100' to 110'	
Material and Depth Interval:	LIMESTONE + SHALE from 110' to 134'	

Drillhole Diameter and Anticipated Depth Intervals:

Diameter and Depth Interval:	17.0 from 0' to 160'	
Diameter and Depth Interval:	12.0 from 160' to 500'	
Diameter and Depth Interval:		

Permanent Casing or Liner Diameter and Wall Thickness at Anticipated Depth Intervals:

Diameter and Wall Thickness at Depth Interval:	12.0 " diam/ .375 " thick 0' to 160'	" diam/ " thick 0' to '
Diameter and Wall Thickness at Depth Interval:	" diam/ " thick ' to '	" diam/ " thick ' to '

Permanent Casing or Liner Material, If Used:

Casing Joints (Welded, T and C, etc.)	WELDED
Material and Weight at Depth Interval:	STEEL 49.56 lbs/foot 0' to 160'
Material and Weight at Depth Interval:	/ lbs/foot ' to '
Screen Material, Slot Size in Inches and Depth Interval or N/A if none:	NA / " / ' to '
Casing to Screen Joint (Welded, T and C, K Packer, etc.)	NA

Annular Space Material Including Filter Pack Material, If Used:

Material and Depth Interval:	NEAT CEMENT / 0' to 160'	/ 0' to '
Material and Depth Interval:	/ ' to '	/ ' to '
Proposed Average Water Usage Per Day in Gallons:	432,000 (300 GPM)	
Proposed Maximum Water Usage Per Day in Gallons:	864,000 (600 GPM)	
Seasonal? (April to October, Year Around, etc.):	YEAR ROUND	
Proposed Pump Type & Capacity (gpm):	SUBMERSIBLE / 600 GPM	
Discharge Type (Over Top of Casing Seal, Pitless Adapter or Unit):	OVER TOP OF CASING	
Discharge Location (Building Pressure Tank, Pond, etc.):	POND	
Distance and Direction to Nearest Public Utility Well & Well Name:	2 MILES SOUTH WEST GRAND RIVER DISTRIBUTION BE532	
Distance to Other Potential Contaminant Sources:	1.5 MILES SOUTH WEST TOWN OF MACKFORD LANDFILL.	
Distance to Other Potential Contaminant Sources:		
Leave Blank, for Department use only		

Required Attachments

1. Attach one of the maps described in A. or B., below. Plot the existing and proposed well locations on the map. For wells that have a Wisconsin Unique Well Number or a Permanent High Capacity Well Number, plot the well locations with one of those numbers.
 - A. Copy of a plat map with the property boundary clearly shown. If the property is contiguous with properties owned by the same owner in another township, include a copy of that township map too, showing the property boundaries. If the property owner listed on the plat map is different from the current owner, list the date or dates, that the current property owner purchased the property on the map.
 - B. Map of the property prepared by a licensed land surveyor and the property description as described by the surveyor.
2. Sketch map showing all of the following that are planned or exist within 300 feet of each proposed well: proposed well location; other wells; property boundary; wetlands; potential contaminant sources (septic tank and drainfield, petroleum storage tanks, sewer lines, etc.); buildings and north arrow. If no pertinent features to map within 300 feet of the proposed well, for example an irrigation well in the middle of a field, state that on the property map listed above and plot the well locations on that map.
3. Any well construction records available for existing wells on the property. Do not attach any well construction records for wells that are not on the property. If a Wisconsin Unique Well Number has not been assigned, write a well name or site well number on the record that correlates to the well name or number plotted on the maps.
4. For proposed wells with a capacity greater than 400 gallons per minute, include the performance curve or performance table that is provided by the pump manufacturer. If the pump will be a lineshaft turbine, provide a curve with the same rpm as the motor under full load and list the motor horsepower.
5. If more than one well is connected to a common plumbing system, also provide a schematic drawing of the system showing method of preventing backflow. This sketch must include the well discharge (pitless, over top of casing sanitary seal); the water line from the well; pressure tanks; sampling faucets; check valves; backflow preventers; air gaps; manually operated valves; water meters; pressure switches for pumps; and any other pertinent fittings. This schematic drawing must also identify which of these components are buried or above ground. If there is more than one check valve within the well casing, include in-well check valves on the schematic.
6. If reconstruction of an existing well is proposed, include a diagram of the current well construction and a diagram of the proposed construction.
7. If the application is for a high capacity well or wells, a \$500.00 check payable to the Department of Natural Resources, unless the application is only for continued operation after a change of ownership.

Certification and Applicant Signatures

If the application requests a variance for a well within 1,200 feet of a landfill, a well on a property with a groundwater use restriction, or any other variance to NR 812, Wis. Adm. Code, the property owner must sign the application. If the well operator will install a well on property that he or she does not own, the property owner must also sign the application. Otherwise, an agent of the owner may sign the application.

Unsigned and incomplete applications will not be approved.

By signing this form, the person signing this application certifies that to the best of his or her knowledge, all existing well installations on the property comply with ch. NR 812, Wis. Adm. Code. The person also certifies that to the best of his or her knowledge, all information in the application is accurate and correct.

Name - Print

JEFF KRAMER

Check Box

☐ Owner☒ Agent of the Owner

Signature

Jeff Kramer

Company

SAM'S WELL DRILLING

Date

1/28/14

Application submittal. Mail completed application and payment with all required attachments to DNR, Private Water Systems Section - DG/2, PO Box 7921, Madison WI 53707-7921.

Definitions from Wisconsin Administrative Codes

"High capacity well" means a well constructed on a high capacity property. [NR 812.07(51)]

"High capacity property" means one property on which a high capacity well system exists or is to be constructed. [NR 812.07(52)]

"High capacity well system" means one or more wells, drillholes or mine shafts used or to be used to withdraw water for any purpose on one property, if the total pumping or flowing capacity of all wells, drillholes or mine shafts on one property is 70 or more gallons per minute based on the pump curve at the lowest system pressure setting, or based on the flow rate. [NR 812.07(53)]

"Public water system" means a system for the provision to the public of piped water for human consumptions if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such system includes: (a) Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (b) Any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. [NR 812.07(80)]

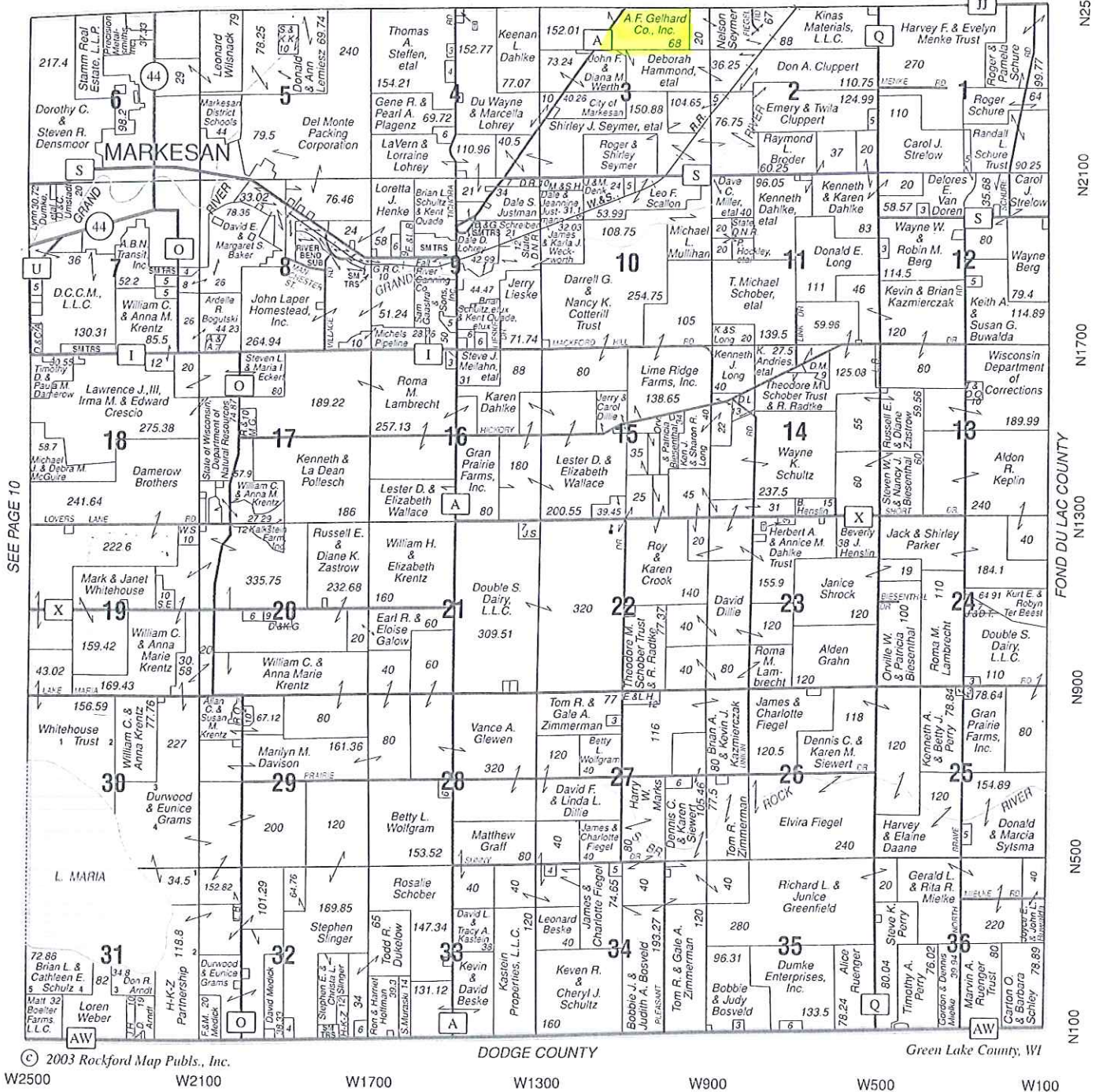
"School" means a public or private educational facility in which a program of educational instruction is provided to children in any grade or grades from kindergarten through the 12th grade. Water systems serving athletic fields, school forests, environmental centers, home-based schools, day-care centers and Sunday schools are not school water systems. [NR 812.07(94)]

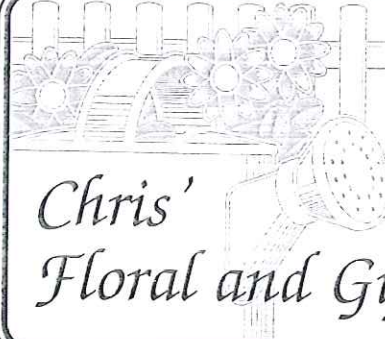
"Wastewater treatment plant" means any facility provided for the treatment of sanitary or industrial wastewater or both. The following types of facilities are excluded: (a) Facilities defined as private sewage systems in s. 145.01(12), Stats. (b) Pretreatment facilities from which effluent is directed to a public sewer system for treatment. (c) Industrial wastewater treatment facilities which consist solely of a land disposal system. [NR 114.03(14)]

MACKFORD

T.14N.-R.13E.

SEE PAGE 15





Chris' Floral and Gifts

29 S. Bridge Street
Markesan, WI 53946
(920) 398-2641

SLATE LAW OFFICES

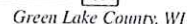
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